STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

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Application Serial Number: 10/567, 749Source: $1F \omega P$ Date Processed by STIC: 02/28/2006

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http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

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- 1. EFS-Bio (http://www.uspto.gov/ebc/efs/downloads/documents.htm, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
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Revised 01/10/06



Corrected Diskette Needed

IFWP

RAW SEQUENCE LISTING PATENT APPLICATION: US/10/567,749

DATE: 02/28/2006 TIME: 12:03:09

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\02282006\J567749.raw

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030235 C--> 4 <140> CURRENT APPLICATION NUMBER: US/10/567,749

4 <141> CURRENT FILING DATE: 2006-02-10

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ERRORED SEQUEDED

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E--> 93

E--> 93

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99 Gln Glu Pro Ser Asp Asn Asp Leu Ala Glu Glu Leu Leu Ser Gln

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102 Gly Ala Thr Gln Arg Val Leu Asp Ala Thr Gln Leu Tyr Leu Gly Glu

105 Ile Gly Tyr Ser Pro Leu Leu Thr Ala Glu Glu Glu Val Tyr Phe Ala

70

109 Arg Arg Ala Leu Arg Gly Asp Val Ala Ser Arg Arg Met Ile Glu 85

112 Ser Asn Leu Arg Leu Val Val Lys Ile Ala Arg Arg Tyr Gly Asn Arg

100 105

115 Gly Leu Ala Leu Leu Asp Leu Ile Glu Glu Gly Asn Leu Gly Leu Ile

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118 Arg Ala Val Glu Lys Phe Asp Pro Glu Arg Gly Phe Arg Phe Ser Thr 135

121 Tyr Ala Thr Trp Trp Ile Arg Gln Thr Ile Glu Arg Ala Ile Met Asn

122 145 150 155

124 Gln Thr Arg Thr Ile Arg Leu Pro Ile His Ile Val Lys Glu Leu Asn

127 Val Tyr Leu Arg Thr Ala Arg Glu Leu Ser His Lys Leu Asp His Glu

180 185 190 130 Pro Ser Ala Glu Glu Ile Ala Glu Gln Leu Asp Lys Pro Val Asp Asp

195 200 205

133 Val Ser Arg Met Leu Arg Leu Asn Glu Arg Ile Thr Ser Val Asp Thr

134 210 215 220

DATE: 02/28/2006

TIME: 12:03:09

Input Set : A:\pto.da.txt Output Set: N:\CRF4\02282006\J567749.raw 136 Pro Leu Gly Gly Asp Ser Glu Lys Ala Leu Leu Asp Ile Leu Ala Asp 137 225 230 235 139 Glu Lys Glu Asn Gly Pro Glu Asp Thr Thr Gln Asp Asp Asp Met Lys 245 250 142 Gln Ser Ile Val Lys Trp Leu Phe Glu Leu Asn Ala Lys Gln Arg Glu 260 265 145 Val Leu Ala Arg Arg Phe Gly Leu Leu Gly Tyr Glu Ala Ala Thr Leu 146 275 280 148 Glu Asp Val Gly Arg Glu Ile Gly Leu Thr Arg Glu Arg Val Arg Gln 290 295 149 300 151 Ile Gln Val Glu Gly Leu Arg Arg Leu Arg Glu Ile Leu Gln Thr Gln 310 315 154 Gly Leu Asn Ile Glu Ala Leu Phe Arg Glu 325 hard reluiss Enter E--> 157 <210> SEQ ID NO: 3<211> 993<212> DNA<213> Escherichia coli<220> 221> Allele<222> 158 <223> OTHER INFORMATION: rpoS allele W--> 160 <E--> 162 -P--> 1.6? <- !... £--> 162 - 15 162 <400> SEQUENCE: 3 163 atgagtcaga atacgctgaa agttcatgat ttaaatgaag atgcggaatt tgatgagaac 60 165 ggagttgagg tttttgacga aaaggcctta gtagaatagg aacccagtga taacgatttg 120 167 gccgaagagg aactgttate gcagggagce acacagcgtg tgttggacge gactcagett 169 taccttggtg agattggtta ttcaccactg ttaacggccg aagaagaagt ttattttgcg 240 171 egtegegeae tgegtggaga tgtegeetet egeegeegga tgategagag taacttgegt 300 173 ctggtggtaa aaattgcccg ccgttatggc aatcgtggtc tggcgttgct ggaccttatc 175 gaagagggca acctggggct gatccgcgcg gtagagaagt ttgacccgga acgtggtttc 420 177 cgcttctcaa catacgcaac ctggtggatt cgccagacga ttgaacgggc gattatgaac 480 179 caaacccqta ctattcqttt gccqattcac atcqtaaagg agctgaacqt ttacctqcga 540 181 accgcacgtg agttgtccca taagctggac catgaaccaa gtgcggaaga gatcgcagag 600 183 caactggata agccagttga tgacgtcagc cgtatgcttc gtcttaacga gcgcattacc 660 185 teggtagaca eccegetggg tggtgattee gaaaaagegt tgetggacat eetggeegat 720 187 gaaaaaqaga acggtccgqa aqataccacg caagatgacg atatgaagca gagcatcgtc 780 189 aaatggctgt tcgagctgaa cgccaaacag cgtgaagtgc tggcacgtcg attcggtttg 191 ctggggtacg aagcggcaac actggaagat gtaggtcgtg aaattggcct caccegtgaa 900 193 cgtgttcgcc agattcaggt tgaaggcctg cgccgtttgc gcgaaatcct gcaaacgcag 960 195 gggctgaata tcgaagcgct gttccgcgag taa, 993 E--> 197 <210> SEQ ID NO: 4 211> 75 212> DNA 213> Escherichia coli 220> 221> tRNA 222> 198 <223> OTHER INFORMATION: supE allele E--> 200 < E--> 200 E--> 200 E--> 200 <400> SEQUENCE: 4 201 tggggtatcg ccaagcggta aggcaccgga ttctaattcc ggcattccga ggttcgaatc 60 203 ctcgtacccc agcca 75 E--> 207 <210> SEQ ID NO: 5<211> 1545<212> DNA<213> Escherichia coli<220 < 221> CDS<222> 208 <223> OTHER INFORMATION: ilvA-Gen E--> 210

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/567,749

Input Set : A:\pto.da.txt

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						Gln												
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		GT.A.	Vu.	ild	Thr	Ăта	ser-	Aia	GÌУ	AST		Αιа	GIn'	Gly	Val		'illie	
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						tta												336
		Ser	Ser	Ala		Leu	GIY	Vai	Lys		Leu	He	Val	Met		Thr	Ala	
	237				100					105					110			204
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	241	1111	Ата	115	116	Lys	vai	Asp	120	vai	Arg	GIY	Phe	125	GIY	Gru	vai	
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						Ala												432
	245		130		017		110,11	135	1	014	1114	_,_	140	_,,			014	
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						ccg												720
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Input Set : A:\pto.da.txt

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	gcg Ala																864
282			275	_				280		_			285				
	ggc																912
285	Gly	A1a 290	Leu	Ala	Leu	Ala	G1y 295	Met	Lys	Lys	Tyr	300	Ala	Leu	Hıs	Asn	
	att		aac	gaa	caa	cta		cat	att	ctt	tcc		acc	aac	ata	aac	960
	Ile	_		_		_							-				500
	305	5	1		5	310					315	1				320	
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293	Phe	His	Gly	Leu	Arg	Tyr	Val	Ser	Glu	Arg	Cys	Glu	Leu	Gly	Glu	Gln	
294					325					330					335		
	cgt																1056
297	Arg.	(2 ! 11	ΔIA	1.eu 34°0′	ַיום, וַ	Α.'	Τę	'l'hr		Pro		GIII.	Lys			one.	4.4
	ctc				C22	ata	c++	aac				ata	200	350		330	1104
	Leu																1104
302		,	355	Cyb	01		Lcu	360	O _T	**** 9	DCI	var	365	014		11011	
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	Tyr	-							_	_			_			_	
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	Leu																1230
318				420	•			-	425	,				430			
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	tat Tyr																1440
331		A.y	DGI	1112	Gry	470	rop	TAT	GIY	ALY.	475	⊥1€U	та	лıа	L TIG	480	
	ctt	gac	qac	cat	gaa		gat	ttc	gaa	acc	_	cta	aat	gag	cta		1488
	Leu																
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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/567,749

DATE: 02/28/2006 TIME: 12:03:09

Input Set : A:\pto.da.txt

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     399 Ala Met Lys Asp Leu Phe Glu Asp Val Arg Ala Val Ala Glu Pro Ser
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     402 Gly Ala Leu Ala Leu Ala Gly Met Lys Lys Tyr Ile Ala Leu His Asn
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                                                315
     408 Phe His Gly Leu Arg Tyr Val Ser Glu Arg Cys Glu Leu Gly Glu Gln
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Input Set : A:\pto.da.txt

Output Set: N:\CRF4\02282006\J567749.raw

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	415			355					360					365				
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		GIU	Arg		IYI	PET	FILE	Giu		PIO	Giu	SET	PIO		AIa	цец	neu	
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		ьeu	GIY	Asp	nis		E	HEL	rne	Giu		Arg	ьeu	ASII	Giu		GIY	- 1
	439					485	_				490	_	_		_	495		- /
	441	Tyr	Asp	Cys	His	Asp	Glu	Thr	Asn	Asn	Pro	Ala	Phe	Arg	Phe	Phe	Leu	- /
	442				500				_	505					510			-
	444	Ala	Gly			1/					1							- (
	447	-210	> 51	TT OS	NO.	ريار.	111	154	2212	וח כ	JAZZ	3 - 1	ach:	ricl	nia d	i for		/ ^
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	449 455 455 455 455 456 457 466 466 466 466	<213 <400 atg Met 1 tta Leu ccg	3> OI 9ct Ala aga Arg cta Leu	RGANI GAC Asp GCA Ala CAA Gln 35	ISM: ICE: tcg Ser gtg Val 20 aaa Lys	7 caa Gln 5 ctg Leu atg Met	ccc Pro cgc Arg gaa Glu	ctg Leu gcg Ala aaa Lys	tcc Ser ccg Pro ctg Leu 40	ggt Gly gtt Val 25 tcg Ser	gct Ala 10 tac Tyr tcg Ser	ccg Pro gag Glu cgt Arg	gaa Glu gcg Ala ctt Leu	ggt Gly gcg Ala gat Asp 45	gcc Ala cag Gln 30 aac Asn	gaa Glu 15 gtt Val gtc Val	Tyr acg Thr att	96
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	449 455 455 455 456 456 461 466 466 468 469	<213 <400 atg Met 1 tta Leu ccg Pro ctg	3> OI 9ct Ala aga Arg cta Leu	RGANI GAC Asp GCA Ala Caa Gln 35 aag	ISM: ICE: tcg Ser gtg Val 20 aaa Lys	7 caa Gln 5 ctg Leu atg Met	ccc Pro cgc Arg gaa Glu gat	ctg Leu gcg Ala aaa Lys	tcc Ser ccg Pro ctg Leu 40 cag	ggt Gly gtt Val 25 tcg ser	gct Ala 10 tac Tyr tcg ser	ccg Pro gag Glu cgt Arg	gaa Glu gcg Ala ctt Leu	ggt Gly gcg Ala gat Asp 45 ttt	gcc Ala cag Gln 30 aac Asn	gaa Glu 15 gtt Val gtc Val	Tyr acg Thr att Ile cgc	96
	449 455 455 455 456 457 466 466 466 466 467 470	<213 <400 atg Met 1 tta Leu ccg Pro ctg Leu	3> OB gct Ala aga Arg cta Leu gtg Val 50	GGANI Gac Asp gca Ala caa Gln 35 aag Lys	ISM: ICE: tcg Ser gtg Val 20 aaa Lys cgc Arg	7 caa Gln 5 ctg Leu atg Met gaa Glu	ccc Pro cgc Arg gaa Glu gat Asp	ctg Leu gcg Ala aaa Lys cgc Arg 55	tcc Ser ccg Pro ctg Leu 40 cag Gln	ggt Gly gtt Val 25 tcg Ser cca Pro	gct Ala 10 tac Tyr tcg Ser gtg Val	ccg Pro gag Glu cgt Arg cac	gaa Glu gcg Ala ctt Leu agc Ser 60	ggt Gly gcg Ala gat Asp 45 ttt Phe	gcc Ala cag Gln 30 aac Asn aag Lys	gaa Glu 15 gtt Val gtc Val ctg Leu	Tyr acg Thr att Ile cgc Arg	96 144 192
	449 455 455 455 456 457 466 466 466 466 467 472	<213 <400 atg Met 1 tta Leu ccg Pro ctg Leu ggc	3> OB gct Ala aga Arg cta Leu gtg Val 50 gca	GGANI Gac Asp gca Ala caa Gln 35 aag Lys	ISM: ICE: tcg Ser gtg Val 20 aaa Lys cgc Arg	7 caa Gln 5 ctg Leu atg Met gaa Glu atg	ccc Pro cgc Arg gaa Glu gat Asp	ctg Leu gcg Ala aaa Lys cgc Arg 55 gcg	tcc Ser ccg Pro ctg Leu 40 cag Gln	ggt Gly gtt Val 25 tcg Ser cca Pro	gct Ala 10 tac Tyr tcg Ser gtg Val	ccg Pro gag Glu cgt Arg cac His	gaa Glu gcg Ala ctt Leu agc Ser 60 gaa	ggt Gly gcg Ala gat Asp 45 ttt Phe	gcc Ala cag Gln 30 aac Asn aag Lys	gaa Glu 15 gtt Val gtc Val ctg Leu	Tyr acg Thr att Ile cgc Arg	96
	449 455 455 455 456 457 458 461 466 466 466 470 473	<213 <400 atg Met 1 tta Leu ccg Pro ctg Leu ggc Gly	3> OB gct Ala aga Arg cta Leu gtg Val 50 gca	GGANI Gac Asp gca Ala caa Gln 35 aag Lys	ISM: ICE: tcg Ser gtg Val 20 aaa Lys cgc Arg	7 caa Gln 5 ctg Leu atg Met gaa Glu atg	ccc Pro cgc Arg gaa Glu gat Asp atg Met	ctg Leu gcg Ala aaa Lys cgc Arg 55 gcg	tcc Ser ccg Pro ctg Leu 40 cag Gln	ggt Gly gtt Val 25 tcg Ser cca Pro	gct Ala 10 tac Tyr tcg Ser gtg Val	ccg Pro gag Glu cgt Arg cac His	gaa Glu gcg Ala ctt Leu agc Ser 60 gaa	ggt Gly gcg Ala gat Asp 45 ttt Phe	gcc Ala cag Gln 30 aac Asn aag Lys	gaa Glu 15 gtt Val gtc Val ctg Leu	Tyr acg Thr att Ile cgc Arg cac His	96 144 192
	449 4555 4555 4556 4567 4561 4668 4668 4668 4773 4774	<213 <400 atg Met 1 tta Leu ccg Pro ctg Leu ggc Gly 65	3> OB gct Ala aga Arg cta Leu gtg Val 50 gca Ala	GGANT GAC Asp gca Ala caa Gln 35 aag Lys tac	ISM: ICE: tcg Ser gtg Val 20 aaa Lys cgc Arg	7 caa Gln 5 ctg Leu atg Met gaa Glu atg Met	ccc Pro cgc Arg gaa Glu gat Asp atg Met 70	ctg Leu gcg Ala aaa Lys cgc Arg 55 gcg Ala	tcc ser ccg Pro ctg Leu 40 cag Gln ggc Gly	ggt Gly gtt Val 25 tcg Ser cca Pro ctg Leu	gct Ala 10 tac Tyr tcg Ser gtg Val acg Thr	ccg Pro gag Glu cgt Arg cac His gaa Glu 75	gaa Glu gcg Ala ctt Leu agc Ser 60 gaa Glu	ggt Gly gcg Ala gat Asp 45 ttt Phe cag Gln	gcc Ala cag Gln 30 aac Asn aag Lys aaa	gaa Glu 15 gtt Val gtc Val ctg Leu gcg Ala	Tyr acg Thr att Ile cgc Arg cac His 80	96 144 192 240
	449 4555 4555 4556 4567 4561 4668 4668 4668 4773 4774	<213 <400 atg Met 1 tta Leu ccg Pro ctg Leu ggc Gly	3> OB gct Ala aga Arg cta Leu gtg Val 50 gca Ala	GGANT GAC Asp gca Ala caa Gln 35 aag Lys tac	ISM: ICE: tcg Ser gtg Val 20 aaa Lys cgc Arg	7 caa Gln 5 ctg Leu atg Met gaa Glu atg Met	ccc Pro cgc Arg gaa Glu gat Asp atg Met 70	ctg Leu gcg Ala aaa Lys cgc Arg 55 gcg Ala	tcc ser ccg Pro ctg Leu 40 cag Gln ggc Gly	ggt Gly gtt Val 25 tcg Ser cca Pro ctg Leu	gct Ala 10 tac Tyr tcg Ser gtg Val acg Thr	ccg Pro gag Glu cgt Arg cac His gaa Glu 75	gaa Glu gcg Ala ctt Leu agc Ser 60 gaa Glu	ggt Gly gcg Ala gat Asp 45 ttt Phe cag Gln	gcc Ala cag Gln 30 aac Asn aag Lys aaa	gaa Glu 15 gtt Val gtc Val ctg Leu gcg Ala	Tyr acg Thr att Ile cgc Arg cac His 80	96 144 192
	449 4555 4555 4556 4567 4561 4668 4668 4773 4776	<213 <400 atg Met 1 tta Leu ccg Pro ctg Leu ggc Gly 65 ggc	3> OB gct Ala aga Arg cta Leu gtg Val 50 gca Ala	GGANT GAC Asp gca Ala caa Gln 35 aag Lys tac Tyr	ISM: ICE: tcg Ser gtg Val 20 aaa Lys cgc Arg gcc Ala act	7 caa Gln 5 ctg Leu atg Met gaa Glu atg Met	ccc Pro cgc Arg gaa Glu gat Asp atg Met 70 tct	ctg Leu gcg Ala aaa Lys cgc Arg 55 gcg Ala	tcc ser ccg Pro ctg Leu 40 cag Gln ggc Gly	ggt Gly gtt Val 25 tcg Ser cca Pro ctg Leu	gct Ala 10 tac Tyr tcg Ser gtg Val acg Thr	ccg Pro gag Glu cgt Arg cac His gaa Glu 75 gcg	gaa Glu gcg Ala ctt Leu agc Ser 60 gaa Glu cag	ggt Gly gcg Ala gat Asp 45 ttt Phe cag Gln	gcc Ala cag Gln 30 aac Asn aag Lys aaa Lys	gaa Glu 15 gtt Val gtc Val ctg Leu gcg Ala	Tyr acg Thr att Ile cgc Arg cac His 80 ttt	96 144 192 240
	449 4555 4555 4556 4567 4561 4668 4668 4773 4776	<213 <400 atg Met 1 tta Leu ccg Pro ctg Leu ggc Gly 65	3> OB gct Ala aga Arg cta Leu gtg Val 50 gca Ala	GGANT GAC Asp gca Ala caa Gln 35 aag Lys tac Tyr	ISM: ICE: tcg Ser gtg Val 20 aaa Lys cgc Arg gcc Ala act	7 caa Gln 5 ctg Leu atg Met gaa Glu atg Met	ccc Pro cgc Arg gaa Glu gat Asp atg Met 70 tct	ctg Leu gcg Ala aaa Lys cgc Arg 55 gcg Ala	tcc ser ccg Pro ctg Leu 40 cag Gln ggc Gly	ggt Gly gtt Val 25 tcg Ser cca Pro ctg Leu	gct Ala 10 tac Tyr tcg Ser gtg Val acg Thr	ccg Pro gag Glu cgt Arg cac His gaa Glu 75 gcg	gaa Glu gcg Ala ctt Leu agc Ser 60 gaa Glu cag	ggt Gly gcg Ala gat Asp 45 ttt Phe cag Gln	gcc Ala cag Gln 30 aac Asn aag Lys aaa Lys	gaa Glu 15 gtt Val gtc Val ctg Leu gcg Ala	Tyr acg Thr att Ile cgc Arg cac His 80 ttt	96 144 192 240

Same Everor hard Return Euler

E-->

Input Set : A:\pto.da.txt

							gtg	_	_	_		_	_			-		336
	Ser	Ser	Ala	_	Leu	GLY	Val	Lys		Leu	He	Val	Met		Thr	Ala		
482				100					105					110				204
							gac											384
	Thr	Ala	_	Ile	Lys	Val	Asp		Val	Arg	Gly	Phe	_	Gly	Glu	Val		
486			115					120					125					
	_						ttt	_	_									432
	Leu		His	Gly	Ala	Asn	Phe	Asp	Glu	Ala	Lys		Lys	Ala	Ile	Glu		
490		130					135					140						
	_		_	_			ttc				_							480
		Ser	Gln	Gln	Gln	_	Phe	Thr	Trp	Val		Pro	Phe	Asp	His			
	145					150					155					160		
							ggc											528
	Met	Val	Ile	Ala	_	Gln	Gly	Thr	Leu		Leu	Glu	Leu	Leu		Gln		
498					165					170					175			
	_					_	gta				_							576
	Asp	Ala	His		Asp	Arg	Val	Phe		Pro	Val	Gly	Gly		Gly	Leu		
502				180					185					190				
	-				_ , _	-					_					פָּקּק.		€5.¥
	Ala	Άта	_	vai	Ala	Vai	Leu		ட்ys:	"GLII"	Leu'	Metr		'GIn'	ıˌte.	`Lys		• • • •
506			195					200					205					
							gaa											672
	Val		Ala	Val	Glu	Ala	Glu	Asp	Ser	Ala	Cys		Lys	Ala	Ala	Leu		
511		210					215					220						
	_				_	_	gat	_	_	_	_				_	_		720
	_	Ala	GLY	His	Pro		Asp	Leu	Pro	Arg		GLY	Leu	Phe	Ala			
	225					230					235					240		
							atc											768
	GIY	Val	Ala	Val	_	Arg	Ile	GIY	Asp		Thr	Phe	Arg	Leu	_	GIn		
519					245					250					255			
				_	-		atc		_	_	_				_			816
	GIu	Tyr	Leu	_	Asp	тте	Ile	Thr		Asp	ser	Asp	Ala		Cys	Ala		
523		- 4		260					265					270		.		064
	-						gaa											864
	Ата	мет	-	Asp	ьeu	Pne	Glu	_	vai	Arg	Ата	vaı		гÀг	Pro	ser		
527			275					280					285					010
							gga											912
	GIY		ьeu	Ala	ьeu	Ala	Gly	мес	гÀг	гуѕ	Tyr		Ala	ьeu	HIS	Asn		
531		290					295					300						0.00
							gcg											960
		Arg	GIY	GIU	Arg		Ala	HIS	ше	ьeu		GIY	Ala	ASI	vaı			
	305					310					315					320	-	000
				_	_		gtc		_	_	_	_	_		_	-	_	1008
	rne	uis	GTĀ	ьeu	Arg 325	ıyr	Val	ser	GIU	_	cys	GIU	ьeu	стХ		GIU		
539	a	~	~~~			~~~	-+-		~++	330	~	~		~~-	335	++-	-	OE C
							gtg										ا	1056
	arg	GIU	Ala		ьeu	AIG	Val	inr		Pro	GIU	GIU	тÀg	350	ser	FIIE		
543	a+ -			340		a+ -		~~~	345			~+~			++		-	104
545	CCC	aaa	LLC	rgc	caa	crg	ctt	ggc	999	cgt	tcg	arc	acc	gag	LCC	aac		104

Input Set : A:\pto.da.txt

```
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                 355
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     549 tac cgt ttt gec gat gec aaa aac gec tge atc ttt gte ggt gtg ege
                                                                              1152
     550 Tyr Arg Phe Ala Asp Ala Lys Asn Ala Cys Ile Phe Val Gly Val Arg
                                 375
     553 ctg agc cgc ggc ctc gaa gag cgc aaa gaa att ttg cag atg ctc aac
                                                                              1200
     554 Leu Ser Arg Gly Leu Glu Glu Arg Lys Glu Ile Leu Gln Met Leu Asn
     555 385
                             390
                                                  395
     557 gac ggc ggc tac agc gtg gtt gat ctc tcc gac gac gaa atg gcg aag
                                                                              1248
     558 Asp Gly Gly Tyr Ser Val Val Asp Leu Ser Asp Asp Glu Met Ala Lys
                         405
                                             410
     561 cta cac gtg cgc tat atg gtc ggc gga cgt cca tcg cat ccg ttg cag
                                                                              1296
     562 Leu His Val Arg Tyr Met Val Gly Gly Arg Pro Ser His Pro Leu Gln
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     565 gaa cgc ctc tac agc ttc gaa ttc ccg gaa tca ccg ggc gcg ctg ctg
                                                                              1344
     566 Glu Arg Leu Tyr Ser Phe Glu Phe Pro Glu Ser Pro Gly Ala Leu Leu
     567
                 435
                                     440
                                                          445
                                                                              1392
     569 cgc ttc ctc aac acg ctg ggt acg tac tgg aac att tct ttg ttc cac
     570 Arg Phe Far Ash Thr Leu Gly Thr Jyr Trp Ash Ile Ser Leu Phe Ric-
                                                                                - (-
                                 455
     574 tat ege age cat gge ace gae tae ggg ege gta etg geg geg tte gaa
                                                                              1440
     575 Tyr Arg Ser His Gly Thr Asp Tyr Gly Arg Val Leu Ala Ala Phe Glu
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                                                  475
     578 ctt ggc gac cat gaa ccg gat ttc gaa acc cgg ctg aat gag ctg ggc
                                                                              1488
     579 Leu Gly Asp His Glu Pro Asp Phe Glu Thr Arg Leu Asn Glu Leu Gly
     580
                         485
                                             490
     582 tac gat tgc cac gac gaa acc aat aac ccg gcg ttc agg ttc ttt ttg
                                                                              1536
     583 Tyr Asp Cys His Asp Glu Thr Asn Asn Pro Ala Phe Arg Phe Phe Leu
                                         505
     586 gcg ggt tag
                                                                              1545
                                                   hard Reluin Euler
     587 Ala Gly
E--> 590 <210> SEQ ID NO: 8 211> 514 <212> PRT 213> Escherichia coli
E--> 591
E--> 591
E--> 591 ·
W--> 591 <400> SEQUENCE: 8
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     595 Leu Arg Ala Val Leu Arg Ala Pro Val Tyr Glu Ala Ala Gln Val Thr
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                                         25
     598 Pro Leu Gln Lys Met Glu Lys Leu Ser Ser Arg Leu Asp Asn Val Ile
     601 Leu Val Lys Arg Glu Asp Arg Gln Pro Val His Ser Phe Lys Leu Arg
     604 Gly Ala Tyr Ala Met Met Ala Gly Leu Thr Glu Glu Gln Lys Ala His
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     610 Ser Ser Ala Arg Leu Gly Val Lys Ala Leu Ile Val Met Pro Thr Ala
```

Input Set : A:\pto.da.txt

611				100					105					110		
613	Thr	Ala	Asp	Ile	Lys	Val	Asp	Ala	Val	Arg	Gly	Phe	Gly	Gly	Glu	Val
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616	Leu	Leu	His	Gly	Ala	Asn	Phe	Asp	Glu	Ala	Lys	Ala	Lys	Ala	Ile	Glu
617		130		-			135	-			-	140	-			
619	Leu	Ser	Gln	Gln	Gln	Glv	Phe	Thr	Trp	Val	Pro	Pro	Phe	Asp	His	Pro
	145					150					155					160
	Met	Val	Tle	Δla	Glv		Glv	Thr	Len	Δla		Glu	Len	T.e.ii	Gln	
623		*4.2			165	0111	019		LCu	170		0	200	LCu	175	0111
	Asp	λla	uic	T.011		Ara	Wal	Dha	W-1		Wa l	Glv	Glaz	Gl ₃ v		T.011
626	ASD	Ата	птэ	180	rsh	Arg	vaı	FIIC	185	FIU	vai	Gry	Gry	190	GLY	цец
	77-	- דת	C1		777	17-1	T 011	т1.		C1 ~	T 011	Mot	Dro		т1.	Tara
	Ala	Ата	_	vai	Ата	vai	ьeu		пур	GIII	теп	Met		GIII	116	пуъ
630	**- 7	- 1 -	195	**- 7	~1	7.7 -	a1	200	0	31 -	~	T	205	37 -	77.	T
	Val		Ата	vaı	GIU	Ата		Asp	ser	Ата	Cys		ьys	Ата	Ala	Leu
633	_	210		•	_		215	_	_	_	-	220	_			
	Asp	Ala	GLY	His	Pro		Asp	Leu	Pro	Arg		GLY	Leu	Phe	Ala	
	225					230	_				235					240
	Gly	Val	Ala	Val	Lys	Arg	Ile	Gly	Asp		Thr	Phe	Arg	Leu	_	
€30					245			٠, ٠	•	3.20	•				255	
54I	Giu	īλτ.	"Leu"	ASP	'Asp'	Tie	île	"Ini"	٧aı	Āsp	Ser	"Asp"	ĀĽa	Tie	"Ċys"	Ala "
642				260					265					270		
644	Ala	Met	Lys	Asp	Leu	Phe	Glu	Asp	Val	Arg	Ala	Val	Ala	Lys	Pro	Ser
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648		290					295					300				
650	Ile	Arq	Gly	Glu	Arg	Leu	Ala	His	Ile	Leu	Ser	Gly	Ala	Asn	Val	Asn
	305	_	•		~	310					315	-				320
653	Phe	His	Glv	Leu	Arq	Tvr	Val	Ser	Glu	Arq	Cvs	Glu	Leu	Glv	Glu	Gln
654			2		325					330				- 4	335	
	Arg	Glu	Ala	Leu		Ala	Val	Thr	Ile		Glu	Glu	Lvs	Glv		Phe
657	9			340					345				-1-	350		
	Leu	Lvs	Phe		Gln	T.e11	T.em	Glv		Δra	Ser	Wal	Thr		Phe	Asn
660	LCu	טעב	355	Cyb	0111	шец	шец	360	017	**** 9	001	Vul	365	014	1110	11011
	Tyr	Δτα		Δla	Acn	Δla	Luc		Δ 1 =	Cve	т1Д	Dhe		Glv	Val	Δτα
663	TYL	370	FIIC	AIG	ASP	лта	375	ASII	AΙα	Cys	116	380	vai	Gry	vai	ALG
	Leu		7.20	C1	T 011	C1,,		7~~	Tara	C111	т1 о		Cln	Mot	T 011	Nan
	385	ser	Arg	GLY	ьeu		GIU	Arg	пуъ	GIU	395	ьeu	GIII	Mec	ьeu	
		G 3	61		6	390	**- 7	2	*	0		3	a 1	36-4	37.	400
	Asp	GIY	GIY	Tyr		vaı	vaı	Asp	ьeu		Asp	Asp	GIU	met		гÀг
669	_	•		_	405					410	_	_		_	415	
	Leu	His	Val	_	Tyr	Met	Val	GLY	-	Arg	Pro	Ser	Hıs		Leu	Gln
672				420					425					430		
674	Glu	Arg		\mathtt{Tyr}	Ser	Phe	Glu	Phe	Pro	Glu	Ser	Pro	Gly	Ala	Leu	Leu
675			435					440					445			
677	Arg	Phe	Leu	Asn	Thr	Leu	Gly	Thr	Tyr	Trp	Asn	Ile	Ser	Leu	Phe	His
678		450					455					460				
680	Tyr	Arg	Ser	His	Gly	Thr	Asp	Tyr	Gly	Arg	Val	Leu	Ala	Ala	Phe	Glu
681	465				-	470					475					480
683	Leu	Gly	Asp	His	Glu	Pro	Asp	Phe	Glu	Thr	Arg	Leu	Asn	Glu	Leu	Gly
684		•	-		485		-			490					495	-
_																

Input Set : A:\pto.da.txt

```
686 Tyr Asp Cys His Asp Glu Thr Asn Asn Pro Ala Phe Arg Phe Phe Leu
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                                          505
                                                              510
     689 Ala Gly
E--> 692 <210> SEQ ID NO; 9<211> 1548<212> DNA<213> Escherichia coli
W--> 694 <220> FRATURE: /<221> DNA <222> (1)..(1548) <223>
W--> 695
E--> 695
E--> 698
E--> 698
     698 <400> SEQUENCE: 9
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                                                                                60
     701 agetattaaa egeggeaegg taattgacca tateeeegee eagateggtt ttaagetgtt
                                                                               120
     703 gagtetgtte aagetgaeeg aaaeggatea gegeateace attggtetga aeetgeette
     705 tggcgagatg ggccgcaaag atctgatcaa aatcgaaaat acctttttga gtgaagatca
                                                                               240
     707 agtagatcaa ctggcattgt atgcgccgca agccacggtt aaccgtatcg acaactatga
                                                                               300
     709 agtggtgggt aaatcgcgcc caagtctgcc ggagcgcatc gacaatgtgc tggtctgccc
                                                                               360
     711 gaacagcaac tgtatcagcc atgccgaacc ggtttcatcc agctttgccg tgcgaaaacg
                                                                               420
     713 cgccaatgat atcgcgctca aatgcaaata ctgtgaaaaa gagttttccc ataatgtggt
                                                                               480
                                                                               535 July 11
     715 gclggmasatitaattgcggt.tggtnataaa agtntggctc.cctata atg ags wag
     716
                                                             Met Ser Gin
     717
     719 act ttt tac cgc tgt aat aaa gga gaa atc atg agc aaa act atc gcg
                                                                               583
     720 Thr Phe Tyr Arg Cys Asn Lys Gly Glu Ile Met Ser Lys Thr Ile Ala
     723 acg gaa aat gca ccg gca gct atc ggt cct tac gta cag ggc gtt gat
                                                                               631
     724 Thr Glu Asn Ala Pro Ala Ala Ile Gly Pro Tyr Val Gln Gly Val Asp
                             25
                                                  30
     727 ctg ggc aat atg atc atc acc tcc ggt cag atc ccg gta aat ccg aaa
                                                                               679
     728 Leu Gly Asn Met Ile Ile Thr Ser Gly Gln Ile Pro Val Asn Pro Lys
     729
                         40
     731 acg ggc gaa gta ccg gca gac gtc gct gca cag gca cgt cag tcg ctg
                                                                               727
     732 Thr Gly Glu Val Pro Ala Asp Val Ala Ala Gln Ala Arg Gln Ser Leu
                     55
                                          60
     735 gat aac gta aaa gcg atc gtc gaa gcc gct ggc ctg aaa gtg ggc gac
                                                                               775
     736 Asp Asn Val Lys Ala Ile Val Glu Ala Ala Gly Leu Lys Val Gly Asp
                                     75
     739 atc gtt aaa act acc gtg ttt gta aaa gat ctg aac gac ttc gca acc
                                                                               823
     740 Ile Val Lys Thr Thr Val Phe Val Lys Asp Leu Asn Asp Phe Ala Thr
                                 90
     743 gta aac gcc act tac gaa gcc ttc ttc acc gaa cac aac gcc acc ttc
                                                                               871
     744 Val Asn Ala Thr Tyr Glu Ala Phe Phe Thr Glu His Asn Ala Thr Phe
                             105
                                                  110
     747 ccg gca cgt tct tgc gtt gaa gtt gcc cgt ctg ccg aaa gac gtg aag
                                                                               919
     748 Pro Ala Arg Ser Cys Val Glu Val Ala Arg Leu Pro Lys Asp Val Lys
     749
                         120
                                              125
                                                                  130
     752 att gag atc gaa gcg atc gct gtt cgt cgc taa tcttgatgga aatccgggct
                                                                               972
     753 Ile Glu Ile Glu Ala Ile Ala Val Arg Arg
                                          140
     756 atcatgcccg gattaagtct gatgacaaac gcaaaatcgc ctgatgcgct acgcttatca
```

Input Set : A:\pto.da.txt

```
758 ggcctacgtg attcctgcaa tttattgaat ttgttggccg gataaggcat ttacgccgca
                                                                              1092
     760 teeggeatga acaaaactea etttgtetae aatetgaate ggggetateg tgeeeagttt
                                                                              1152
     762 attetttatt gecageegta acgaeggeta tagaaccett teaccaactg ggttaatgte
                                                                              1212
     764 atataccetg ccagaatege aaccagecae gggaaatage ttaacggeag egeetgtaat
                                                                              1272
     766 tgcagataac tggccagcgg tgaaaacggc aatgcgatcc cgacaatcat cacgatcacg
                                                                              1332
     768 gtcatgatca ttaacggcca cgatgcacag ctctgaataa acggcacacg gcgggtgcgg
                                                                              1392
     770 atcatatgca caatcagcgt ttgcgacagt aagcccacca caaaccatcc cgactggaac
                                                                              1452
     772 agcgtttgcg tttccggcgt gttggcatgg aatacccacc acatcaggca aaacgtcaaa
                                                                              1512
     774 atatogaaga togagotgat oggtoogaag aagatg
                                                                              1548
E--> 777 <210> SEQ ID NO: 10<211> 141<212> PRT<213> Escherichia coli
E--> 778 -
E--> 778 4
E--> 778
W--> 778 <400> SEQUENCE: 10
     779 Met Ser Gln Thr Phe Tyr Arg Cys Asn Lys Gly Glu Ile Met Ser Lys
     780 1
     782 Thr Ile Ala Thr Glu Asn Ala Pro Ala Ala Ile Gly Pro Tyr Val Gln
     783
                     20
                                          25
                                                              30
     785 Gly Val. Asp. Leu Gly. Ash Met. The Ile Thr Sex Gly Gly The . Pro Val
                                     40
                                                          45
     788 Asn Pro Lys Thr Gly Glu Val Pro Ala Asp Val Ala Ala Gln Ala Arg
                                 55
     791 Gln Ser Leu Asp Asn Val Lys Ala Ile Val Glu Ala Ala Gly Leu Lys
                             70
                                                  75
     794 Val Gly Asp Ile Val Lys Thr Thr Val Phe Val Lys Asp Leu Asn Asp
                         85
                                              90
     797 Phe Ala Thr Val Asn Ala Thr Tyr Glu Ala Phe Phe Thr Glu His Asn
                                         105
     800 Ala Thr Phe Pro Ala Arg Ser Cys Val Glu Val Ala Arg Leu Pro Lys
                                     120
                 115
     803 Asp Val Lys Ile Glu Ile Glu Ala Ile Ala Val Arg Arg
             130
                                 135
```

VERIFICATION SUMMARYDATE: 02/28/2006PATENT APPLICATION: US/10/567,749TIME: 12:03:11

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\02282006\J567749.raw

L:4 M:270 C: Current Application Number differs, Replaced Current Application No

```
L:4 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:0 M:282 E: Numeric Field Identifier Missing, <120> TITLE INVENTION
L:0 M:201 W: Mandatory field data missing, <130> FILE REFERENCE
L:4 M:283 W: Missing Blank Line separator, <160> field identifier
L:5 M:281 W: Numeric Fields not Ordered, <220> not ordered!.
L:5 M:283 W: Missing Blank Line separator, <220> field identifier
L:5 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:7 M:282 E: Numeric Field Identifier Missing, <210> is required.
L:7 M:282 E: Numeric Field Identifier Missing, <211> is required.
L:7 M:282 E: Numeric Field Identifier Missing, <212> is required.
L:7 M:282 E: Numeric Field Identifier Missing, <213> is required.
L:7 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:0 differs:1
L:92 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQ ID NO: 2<211> 330<212>
PRT<213> Escherichia coli<400> 2
L:93 M:282 E: Numeric Field Identifier Missing, <211> is required.
L:93 M:282 E: Numeric Field Identifier Missing, <212> is required.
L:93 M:282 E: Numeric Field Identifier Missing, <213> is required.
L:93 M:200 A: Mandatory Header Field missing, <400> is required
L:157 W:272 E: (54) Invalid or duplicate Sequence To Number, SEQ IL NO: 2<217> 993<212>
DNA<213> Escherichia coli<220><221> Allele<222>
L:160 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:162 M:282 E: Numeric Field Identifier Missing, <211> is required.
L:162 M:282 E: Numeric Field Identifier Missing, <212> is required.
L:162 M:282 E: Numeric Field Identifier Missing, <213> is required.
L:197 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQ ID NO: 4<211> 75<212>
DNA<213> Escherichia coli<220><221> tRNA<222>
L:200 M:282 E: Numeric Field Identifier Missing, <211> is required.
L:200 M:282 E: Numeric Field Identifier Missing, <212> is required.
L:200 M:282 E: Numeric Field Identifier Missing, <213> is required.
L:200 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:4
L:207 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQ ID NO: 5<211> 1545<212>
DNA<213> Escherichia coli<220><221> CDS<222>
L:210 M:282 E: Numeric Field Identifier Missing, <211> is required.
L:210 M:282 E: Numeric Field Identifier Missing, <212> is required.
L:210 M:282 E: Numeric Field Identifier Missing, <213> is required.
L:210 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:5
L:345 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQ ID NO: 6<211> 514<212>
PRT<213> Escherichia coli
L:346 M:282 E: Numeric Field Identifier Missing, <211> is required.
L:346 M:282 E: Numeric Field Identifier Missing, <212> is required.
L:346 M:282 E: Numeric Field Identifier Missing, <213> is required.
L:346 M:283 W: Missing Blank Line separator, <400> field identifier
L:447 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQ ID NO: 7<211> 1545<212>
DNA<213> Escherichia coli
L:449 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:452 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:455 M:282 E: Numeric Field Identifier Missing, <211> is required.
L:455 M:282 E: Numeric Field Identifier Missing, <212> is required.
L:455 M:282 E: Numeric Field Identifier Missing, <213> is required.
L:590 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQ ID NO: 8<211> 514<212>
PRT<213> Escherichia coli
L:591 M:282 E: Numeric Field Identifier Missing, <211> is required.
```

L:591 M:282 E: Numeric Field Identifier Missing, <212> is required. L:591 M:282 E: Numeric Field Identifier Missing, <213> is required. VERIFICATION SUMMARYDATE: 02/28/2006PATENT APPLICATION: US/10/567,749TIME: 12:03:11

Input Set : A:\pto.da.txt

L:778 M:283 W: Missing Blank Line separator, <400> field identifier

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Output Set: N:\CRF4\02282006\J567749.raw

L:591 M:283 W: Missing Blank Line separator, <400> field identifier
L:692 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQ ID NO: 9<211> 1548<212>
DNA<213> Escherichia coli
L:694 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:695 M:283 W: Missing Blank Line separator, <220> field identifier
L:695 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:698 M:282 E: Numeric Field Identifier Missing, <211> is required.
L:698 M:282 E: Numeric Field Identifier Missing, <212> is required.
L:698 M:282 E: Numeric Field Identifier Missing, <213> is required.
L:777 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQ ID NO: 10<211> 141<212>
PRT<213> Escherichia coli
L:778 M:282 E: Numeric Field Identifier Missing, <211> is required.
L:778 M:282 E: Numeric Field Identifier Missing, <212> is required.
L:778 M:282 E: Numeric Field Identifier Missing, <212> is required.
L:778 M:282 E: Numeric Field Identifier Missing, <212> is required.

L:4 M:203 E: No. of Seq. differs, <160> Number Of Sequences: Input (10) Counted (9)

The state of the state of